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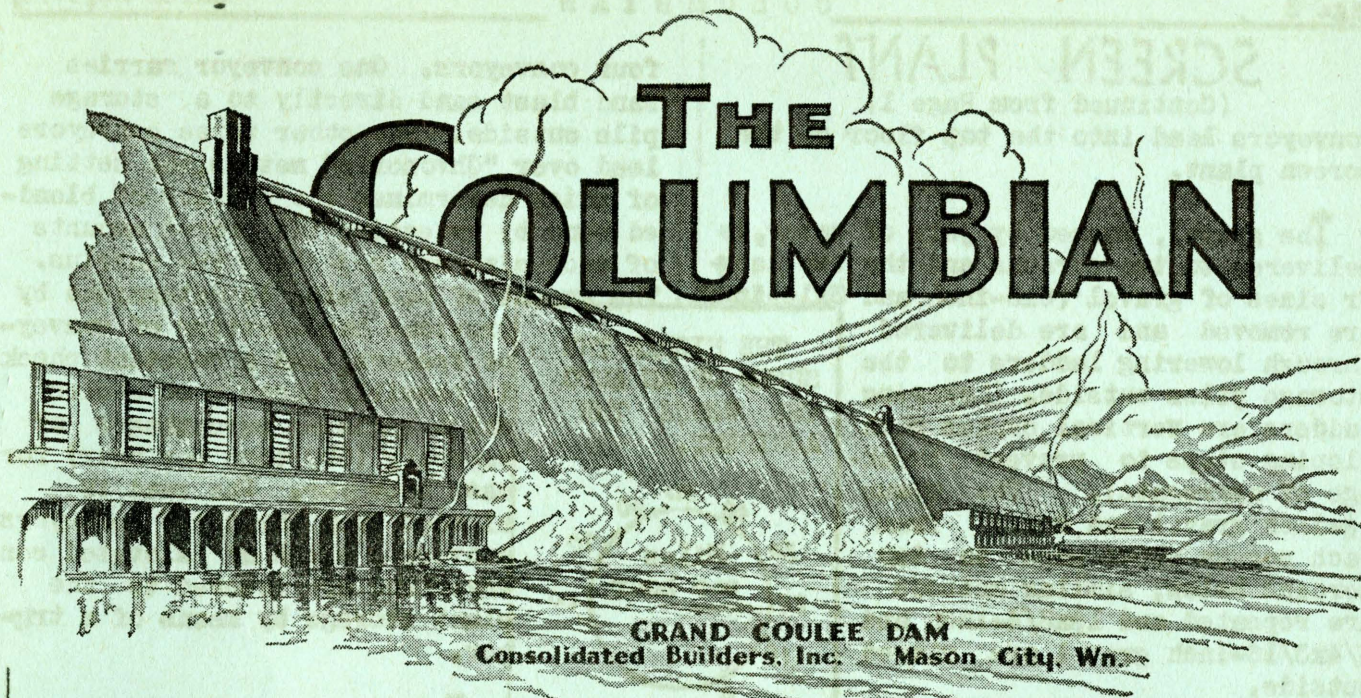
Consolidated Builders

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Vol. 4 No. 6

March 23, 1939

SCREEN PLANT HAS PAUL BUNYAN JOB

One mile north from the east end of Grand Coulee dam is the 5-story screen plant. Inside are mechanisms -- conveyors, sifting screens, chutes of bouncing boulders, scores of jets of water--all basically simple operations, but of unusual interest because of the large scale operations involved and the series of exacting steps necessary to produce a finished product. Along the western side of the plant is a kind of housed-in annex. Inside it and most apparent to the eye are six large bowls of circulating and discolored water. The sand they contain cannot be seen. Outside the building are four piles of different size gravel and one of sand.

These are only several of the most apparent features of screening, laundry and blending work at a gravel plant which has produced and will produce nearly 90 per cent of materials that form concrete in Grand Coulee dam.

Extending westward toward Mason City is a sand dune that should delight any Arabian or Hollywood camel, but which must necessarily be wasted here. Now over 900 feet long, 200 feet high and over 400 feet wide, the dune probably will be about twice its present size on completion of the dam. The pile of waste sand rep-

sents only about half the sand and gravel that has passed through operations of the screening plant, entering at the rate of up to 3500 tons per hour.

Fundamentally, plant operations must wash and screen and separately store four different sizes of gravel. They must wash sand, separate it into three sizes through use of water and rakes (not screens), blend it and store it in one pile outside the plant. Surplus sand must be sent to the waste pile.

Detail operations begin in the pit. Sand and gravel are dumped by a boom conveyor feeder over the brink of the pit into the raw stock pile. Underneath the pile is a concrete chamber containing two 48-inch vibrating feeders. The two feeders deliver to a 60-inch belt delivering into two trommel screens 22 feet long and six feet in diameter. The screens scalp boulders over six inches in diameter and deliver them to two 20-inch gyrator crushers. These reduce boulders to a maximum of six inches. The reduced boulders join the sand and gravel on a 48-inch belt and are dumped into the balancing pile below. Under this is a second concrete chamber with two electric vibrating feeders delivering to two 42-inch conveyors. The

(Continued on Page 2)

SCREEN PLANT

(Continued from Page 1)

conveyors lead into the top floor of the screen plant.

The gravel, washed by jets of water, is delivered to two screens and the two larger sizes of gravel (6x3-inch and 3x1½-inch) are removed and are delivered through lowering ladders to the storage piles outside. (Lowering ladders are vertical chutes with sloping steps to prevent breakage of aggregate). The minus 1½-inch gravel and water from each screen above pass to two screens below; similar methods are repeated and 1½x¾-inch and ¾x¾-inch gravel are stored outside.

The sand is the problem child. All gravel can be used, but in the neighborhood of 65 per cent of the sand must be shunted aside because there is too much of it---

From each pair of eight final screens, sand and water are conveyed to the laundry with its three 35-foot diameter bowls or hydro-separators, each containing a rotating rake. Some waste water, together with minus-100 sand (too small for use), passes over the edge of the bowl into a collecting rim and flows out of the building into two clarifier tanks which will remove as much of the residue sand as possible and send the water back into the screen plant to be used over again.

From the bottom of the hydro-separators the sand is raked into three smaller or classifier tanks below. These operate in series to separate different size sand, not by screening as in the screen plant, but through suspension of sand in moving water. Sand is thus classified into three sizes: 4x20 mesh, 20x48 mesh and 48x100 mesh.

A pair of sand rakes, working alternately, rake classified sand from each classifier to one of

four conveyors. One conveyor carries sand blast sand directly to a storage pile outside. The other three conveyors lead over "Chronoflo" meters, the setting of which determines the quality of blended sand by selecting the proper amounts of each size and rejecting the surplus. The amount of each size is determined by

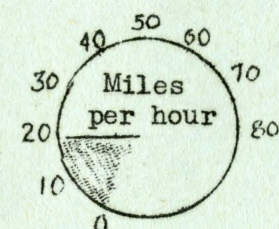
previous hand-setting of conveyor feeders, and a constant check is possible because of scales which register percentages of capacity (500 tons per hour) for each conveyor. The sand is blended when the three conveyors converge, climb an elevated conveyor and are lowered to the plant storage by means of a tripper.

The "Chronoflo" is used for up to 55 different mixes for mass concrete. Thirteen mixes are designed for reinforced concrete; two for grout in the important bonding of concrete to bedrock or concrete surfaces. The variety complies with the most exacting tests of the Bureau of Reclamation and at the same time makes it possible to adjust mix proportions to compensate for any changes in the quality of pit production.

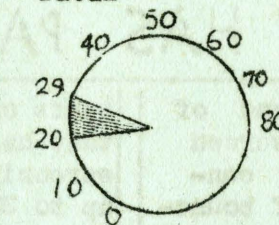
The processes of delivering finished sand and gravel to the storage piles require up to 20 times as much water as residents of Mason City use for all purposes during the hottest of weather. Pumps at the river provide the original water supply against a head of 670 feet; but because of the excessive burden thrown upon pumping sufficient water for all plant operations against such a head, the two clarifier bowls were built north of the plant. The two bowls, one 125 feet in diameter and the other 125x250 feet, act on the principle of the hydro-separator bowls in the sand classifier house. Rakes scrape residual sand out through the bottom of the tanks. Water

(Continued on Page 5)

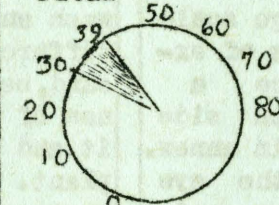
THE HIGHER THE
SPEED OF AN AUTO
THE WORSE THE
ACCIDENT.



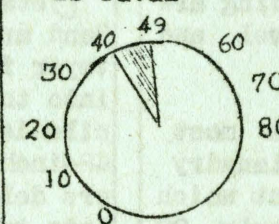
1 accident in 51 is fatal



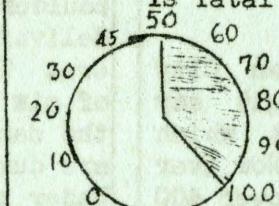
1 accident in 42 is fatal



1 accident in 35 is fatal



1 accident in 25 is fatal



1 accident in 11 is fatal

THE WELL BABY CLINIC

* * * *

The Well Baby Clinic has been in operation about six months and the sponsors feel that the public might be interested in a report on its activities. It might be well at the same time to re-state the aims of this organization for the newcomers or those who have not yet heard of it.

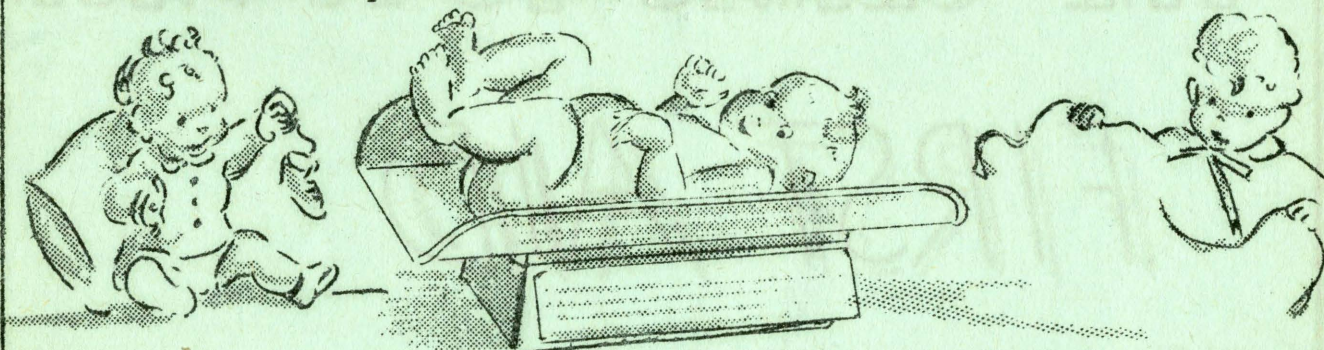
This free clinic was organized to provide a place to which pre-school children could be taken for regular physical check-ups. This service is provided for children of school age by the visits of the school nurse but there had previously been no such facilities for the younger children. This clinic is held on alternate Thursdays at the Mason City Community church from 9:30 a.m. to 11:30 a.m. A doctor is in attendance and the children are weighed, measured and given a thorough physical examination. Advice is given as to diet and attention is called to any physical condition which should be attended to.

There has been a misunderstanding as to the scope of the clinic's activity, many people believing that it was for relief cases only. We wish to make it clear that it is open to all children from birth to six years of age from any locality.

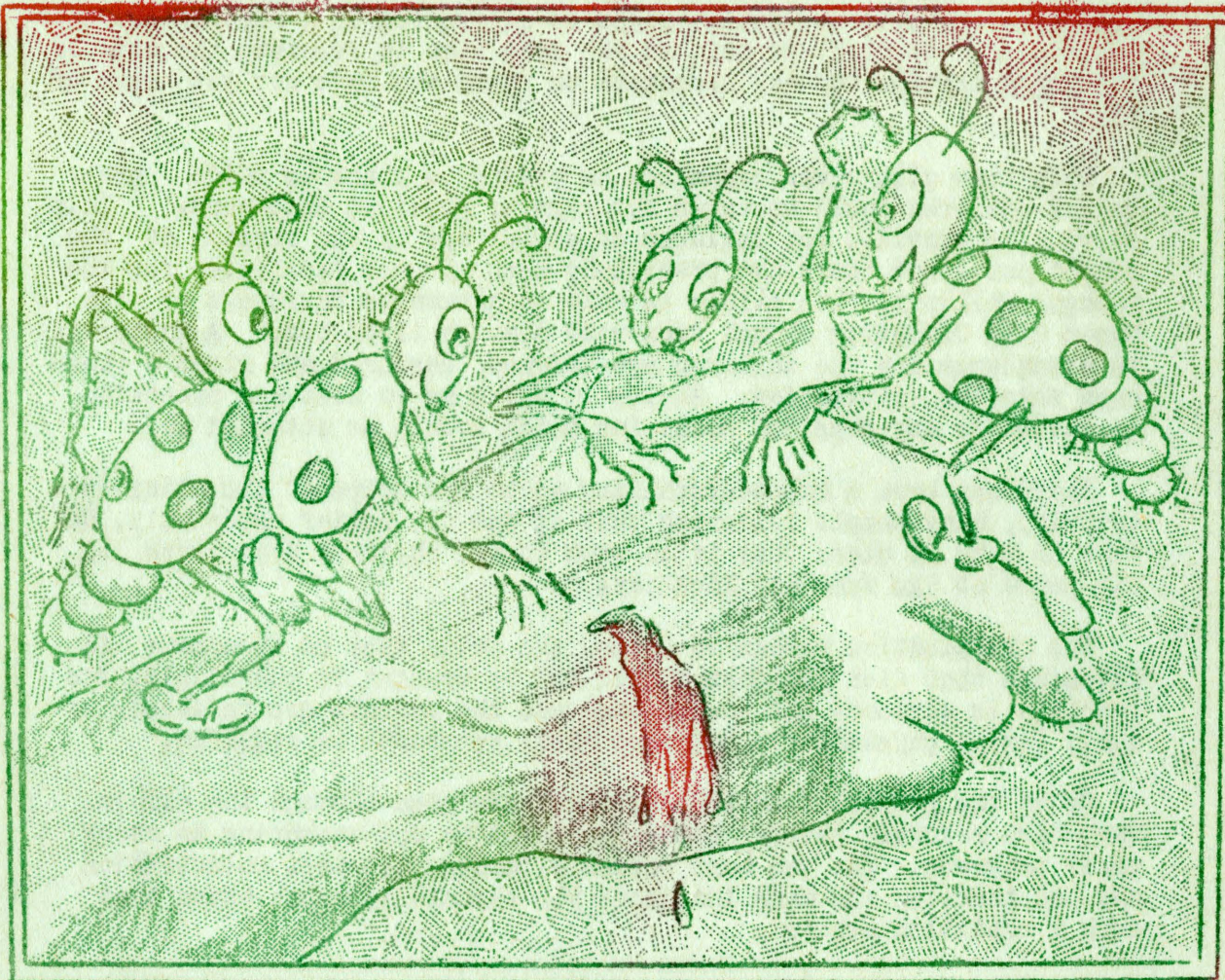
The organization wishes to stress the point that no treatment is given and that sick children should not be brought to the clinic. Its function is advisory and educational and the parents are referred to their family physician in any case where treatment is required.

Up to the present time 150 children have gone through the clinic. Many have returned several times for weighing and measuring to check their progress. The two most common ailments have been malnutrition and bad tonsils. In many instances the parents were not aware that such a condition existed.

The clinic can be continued only if it has the support of the entire community. Bring your children and urge your friends to bring theirs. Half an hour spent at the clinic now may prevent some dangerous and expensive illness in the future by revealing some weakness that might not otherwise be discovered until too late. Remember that it is easier to prevent sickness than to cure it.



BEAT



THE GERMS TO IT WITH

FIRST AID

SCREEN PLANT

(Continued from Page 3) -

to be used again in plant operations is drawn off the top, returns to the screen house, is sprayed over the incoming aggregate and followed by a rinse of fresh water. Fourteen million of 20 million gallons of water used daily at the plant during full-speed operations are reclaimed, leaving only six million to be pumped from the river.

Following requirements of the mixing plants, the airplane tripper operator near the mixing plants will telephone the screen plant of his needs and will turn to his panel board, press a button and air-controlled gates at the screen plant one mile away will open at the proper storage pile and aggregate will head toward the tripper over 10,000 feet of endless belt, 48 inches wide and traveling up to 700 feet per minute. The belt was made in eight 10-ton sections and was vulcanized into one section on the job. The tripper at the main plant storage has hinged wing belts which may be raised or lowered to prevent breakage of the four sizes of gravel on each side of the tripper.

About 20,000 yards of finished gravel and cobbles can be stored at the screen plant stock piles and up to 100,000 yards of sand. About 80,000 yards of gravel and 20,000 yards of sand can be stored at the tripper. The maximum amount of aggregate at the two places would be about a supply of five days for the expected peak of concreting.

The output of the screen and classification system depends upon the kind of pit excavation. Throughout its history the pit has averaged about 65 per cent sand with a requirement of but 28 per cent in the average mix. Throughout CBI's work here the ratio of sand to gravel, based upon daily estimates, has been 58 to 42. Aggregate percentages have been: concrete sand, 14; sand blast sand, 1; waste sand, 43; gravel, 42. On particular days the sand percentage has passed 85, when streaks 1000 feet long and 40 feet thick were encountered. Crushers in the pit and below the raw stock pile have contributed considerably toward the production of the larger aggregate. Maximum output for what might

CHURCH —

CATHOLIC CHURCH- Father A. Farrelly, pastor
9:00 a.m. Mass; Mason City
11:00 a.m. Mass, Grand Coulee

COMMUNITY CHURCH -- Rev. D. E. Peterson,
Minister

9:45 a.m. Church School
11:00 a.m. Morning Worship
11:00 a.m. Nursery and Kindergarten
6:00 p.m. High School young people
7:30 p.m. Vesper Service

CHURCH OF JESUS CHRIST OF LATTER DAY
SAINTS (in Mason City high school) - R.E.
Nuttall, Branch President

10:30 a.m. Opening exercises
11:15 a.m. Departmental works

ZION LUTHERAN CHURCH-Grand Coulee Heights
--E. F. Muhly, Pastor

March 26--Sunday School----10:00 a.m.
Divine worship---11:00 a.m.
April 2---Sunday School----10:00 a.m.
Divine worship--- 7:30 p.m.

---Everybody Welcome---

CHRISTIAN SCIENCE SOCIETY, Coulee Dam (in
government school)

11:00 a.m. Sunday School
11:00 a.m. Church services
Mid-week services, Wednesday, 8:00 p.m.

GRAND COULEE COMMUNITY CHURCH-E.C. Wood,
Pastor

9:45 a.m. Church School
11:00 a.m. Morning Worship
6:30 p.m. United Youth group
6:30 p.m. Intermediate group
7:30 p.m. Evening services

ELECTRIC CITY UNION CHURCH-Rev. C. Carlson,
Pastor

10:00 a.m. Sunday School, Mrs. William
Teeters, superintendent
11:00 a.m. Morning Worship
6:00 p.m. Christian Endeavor

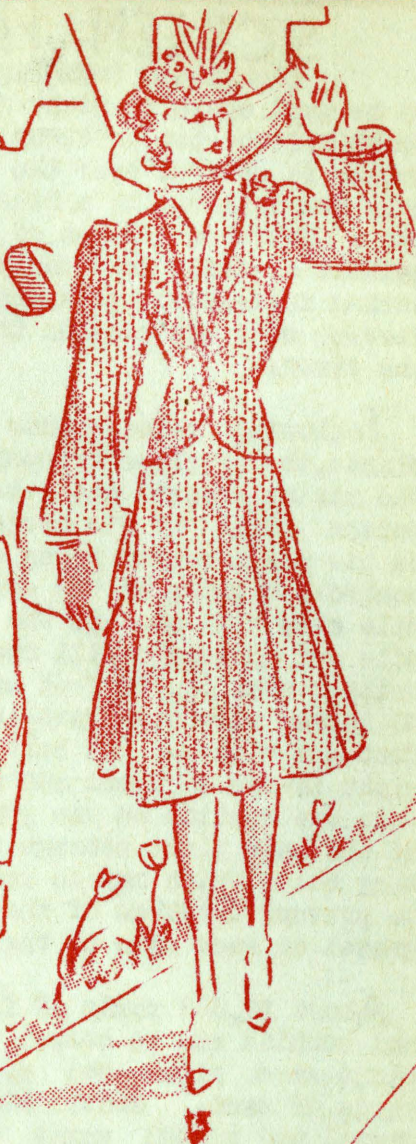
OSBORNE GOSPEL TABERNACLE

10:00 a.m. Sunday School
11:00 a.m. Morning services
7:30 p.m. Evening services

be called average material runs to about 1500 tons per hour for three shift operation of the plant. Ordinarily the plant is operated on a two-shift basis.

EASTER PARADE

OF
HATS ~ DRESSES
SUITS ~
COATS ~



HART SCHAFFNER &
MARX SUITS \$35. TO \$45.

DOBBS HATS \$5 \$7.50 \$10.

WALK OVER SHOES \$6.95 UP

ARROW SHIRTS \$2.00 TO \$3.50

"MASON CITY STORES"

THE EARLY
BIRD GETS
THE WORM...
BUT IT'S THE
CARELESS BIRD
WHO GETS THE
ACCIDENTS!



Over in Columbus, Montana, tonight FRANK (the Great) STEWART is gallivanting on the maple court with the gals called the Ozark Mountain Hillbillies -- as he did with them here. Just vacationing now. ---What does GEORGE AMANS think of higher education? The young patrolman (of age) interrupted the education of a Kappa at Washington State college. He married her. ---JACK NIELSON, once prominent in fist-cuffs along the Coast (and waist line), celebrated his fifth anniversary at the dam site last week. Yes, he celebrated it. ---JACK MEADE, business agent for the carpenters, has a keen interest in national affairs. He's trying to balance the budget: he failed to make a big deduction in his income tax report. ---Just to revive past history-- SYLVIA DeLAE'S eyes may be blue -- but she can tell you about one that was black. ---"Too many accidents are caused by 80 miles per hour cars driven over 40 miles per hour roads by 20 miles per hour drivers." ---Will LEE CLAYTOR buy a 50-chair barber shop?..He's just as calm as a jitterbug.. His drawing of a horse in the Irish Sweepstakes may pay up to \$150,000. The race is tomorrow. ---MR. and MRS. BRADLEY DOOLEY--- ---MR. and MRS. LOUIS CLAYPOOL--- ---The latest creation in permanents from Paris may be seen in the sudden acquisition of waves by "GOLDEN TRESS" BERG. He isn't alone now. ---FREDERICK (SHADOW) MEARS, Spokesman-Review reporter here, now smokes a cigar (an imitation one). He's a publisher today. ---HARRY JAMES, assistant purchasing agent here since Oct., 1934, moved southward to the Henry J. Kaiser purchasing department in Oakland, Calif. And so KENNY NEILSON changed chairs here. ---SUCCESS IN THIS GAME OF LIFE DEPENDS UPON "STAYING POWER." HAVE YOU GOT IT? ---We "appreciation" the cooperation of EARL WILSON, among others, in obtaining information on the screen plant.



by a "feebul" foreman

He maintains that the excise tax is on whiskey but any fool knows it must be a special tax on gymnasiums.

* * * *

But mamma sez no she cant go to this party bezuz I usta be a walker and her old man is only a foreman.

* * * *

It sure beats me how they think up all them movie plots--now in thisn the hero struck oil just in time to pay off the mortgage and keep the mean old money lender from gittin the gal which he loved hisself.

* * * *

How she got the idee I dunno, but this toorist lady sez it sure must be nice for the men havin' a nice soft spoken gent like me for general super.

* * * *

You got a right to be selfish enough to look out for your own hide, but you gotta give a little bit of thought to the other guy too.

* * * *

--and mamma sez its two cold to be havin' beer and to near spring to lay in another supply of whiskey.

* * * *

I figger its the annual show-off of the Polar bare club so I dove in and showed em some real aquatics, but when I git the ice out of my ears the preacher asts will I please resume my clothin and quit disturbin their baptizin.

* * * *

Her mouth wuz so big that you just knew that at sometime or other she'd et peas with a steak knife.

* * * *

The sap may be in the tree (if you kin find one) about this time of the year, but theys one or two runnin around loose on the ground headin for an accident, too.

* * * *

--and mamma sez, "I dont accept no dressed rabbits from the neighbors as long as our cat is missin'."

"Sure, it's easy to get up and yell, 'I'm for safety!' Anyone can do that; or shout from the housetops what a fine thing it is for everybody.

"But it's quite another thing to carry the safety principle with us throughout each day and apply it to our every act.

"Words in themselves do not make safety. Action is what counts, every time."

CIVIL SERVICE EXAMINATIONS--Junior multi-graph operator; chief of occupational information and guidance service; specialist; occupational information; specialist, consultation and field service; specialist, occupations for girls and women.

-----MASON CITY POST OFFICE

As the electrician's wife said at 3 a.m.: "Wire you insulate?"

BORN

at Mason City hospital--
 March 20, to Mr. and Mrs. Ray O. Shuldberg of Electric City, a son.
 March 19, to Mr. and Mrs. Wayne F. O'Hanlon of Grand Coulee, a daughter.
 March 15, to Mr. and Mrs. Theodore R. A. Weber of Grand Coulee, a son.
 March 14, to Mr. and Mrs. Bernard Felix of Grand Coulee, a daughter.
 March 13, to Mr. and Mrs. Irvin Engebretson of Grand Coulee, a son.
 March 12, to Mr. and Mrs. George E. Brown of Elmerton Beach, a daughter.
 March 11, to Mr. and Mrs. William F. Carlson of Grand Coulee Center, a daughter.
 March 8, to Mr. and Mrs. Willis Davidson of Mason City, a son.
 March 7, to Mr. and Mrs. Richard E. Tuttle of Grand Coulee, a daughter.
 March 7, to Mr. and Mrs. Fred Anderson of Mason City, a daughter.



GYMNASIUM HOLDS OPEN HOUSE

Two hours of athletic entertainment will be open in Mason City gymnasium without cost to sport fans of the area, Tuesday, April 4 at 8 p.m.

Gymnasium Open House will be declared on that night by Gailord Nelson, community athletic director, as a dozen different kinds of athletics will headline events on the floor. "We want people to see what we've been doing here in the gymnasium," said Nelson.

Participants, drawn from the entire area, will perform in calisthenics, volley ball (girls, boys), tumbling (girls, boys), tap dancing, ping pong, patica, badminton, fencing, basketball (girls, boys). Other additions will be made to the program. One feature of the evening will be a clash between the Mason City high school basketball team and the remainder of the squad who will be available next year.

The public is urged to attend,

SOFTBALL —

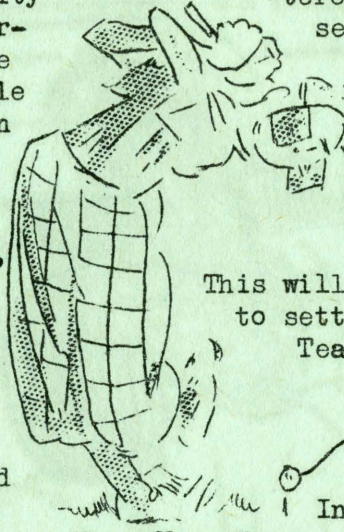
The sun that chased the snow away now chases community athletes together in the first meeting tomorrow night in the interests of softball for the coming season.

ALL TEAMS WHO PLAN TO ENTER THE SOFTBALL LEAGUE IN MASON CITY ARE ASKED TO SEND AT LEAST TWO REPRESENTATIVES TO A MEETING TOMORROW - Friday - IN MASON CITY GYMNASIUM AT 7:30 P.M.

This will be an organization meeting to settle details for the season.

Teams may represent different divisions of work on the dam or in certain cases, communities.

Individuals interested may attend.



Keep Your Eye
On The Ball!!

THE WHY, HOW AND WHERE OF USING A CASTING ROD AND A GUN WILL SOUND OFF TOMORROW NIGHT (FRIDAY, 7:30) AS THE COULEE DAM ROD & GUN CLUB HOLDS ITS REGULAR MEETING IN THE NORTH WING OF THE MESS HALL. The meeting place will not be the north wing banquet room but will be the north wing first aid section, entrance on the west or camp office side of the north wing.

ALL SPORTSMEN ARE URGED TO HELP FORM A LARGE WORKING BODY OF SPORTS-MINDED INDIVIDUALS BY ATTENDING.

Ernest Lytaker, who has held several Northwest championships in fly casting and has rated high in national meets, will be in attendance. He will later instruct in fly casting.

Details will be ironed out tomorrow for an 8-team USBR softball league. The league will consist of seven departmental teams of the Bureau and Mason City high school.

Slated to appear in spring training at the Spokane "Indians" baseball school are E. Boyd and Ted Miller.

Grand Coulee high school surprised the west side dopesters by taking sixth place in the recent state basketball tournament. Grand Coulee upset Morton and Wapato, and lost to Blaine as four teams played in the semi-finals. Merritt was chosen all-state first string forward.

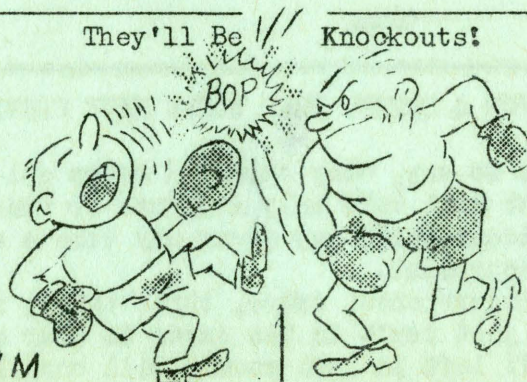
APRIL FOOL'S DANCE

SATURDAY, APRIL 1

for Western Pipe &
Steel softball club

MASON CITY GYM

They'll Be Knockouts!



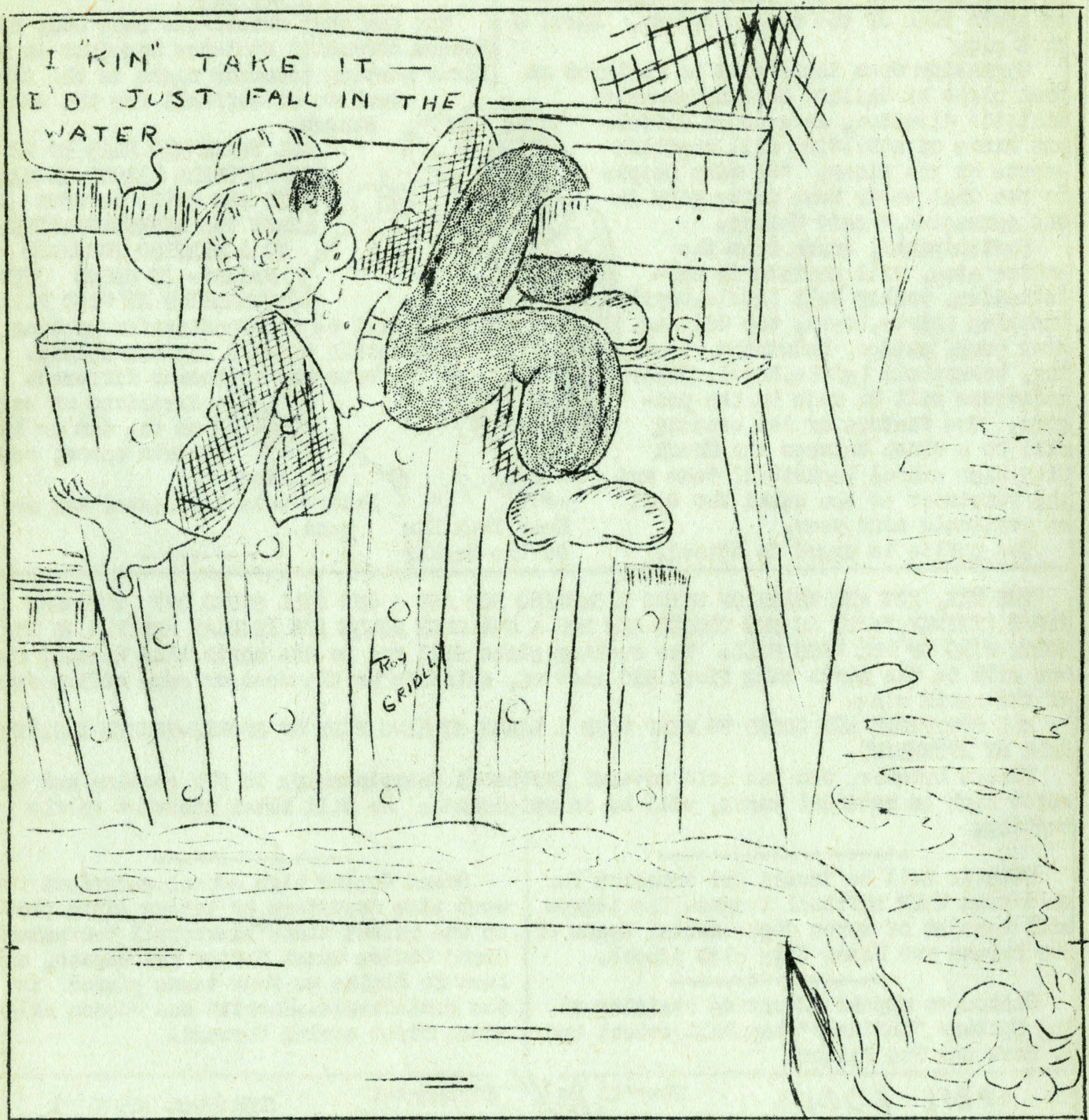
SATURDAY, APRIL 1

Dance

Spode & Maul and
Agnes Gehrman Clubs
in

COULEE DAM GYMNASIUM

DON'T MISTAKE YOUR ABILITY!
WORK "SAFELY"—WEAR A SAFETY
BELT WHEN IT IS DANGEROUS.



WAITING A FEW MOMENTS FOR A SAFETY BELT WOULD HAVE PREVENTED A REGRETTABLE ACCIDENT LAST WEEK--

It is entirely too easy to say, "Why should I go to all the trouble of wearing safety equipment? This job will take only a minute or two." And so the stage is all set for a serious accident which may occur any time a workman fails to protect himself with recommended equipment.

Such a man may escape injury once, twice, three times, but eventually he's doomed to escape it no more. It just isn't in the cards to bear a charmed life forever.

Protective equipment, if left in tool rooms, will cost lives. If used, it will save them.

REMEMBER THE WELL BABY CLINIC AT MASON CITY COMMUNITY CHURCH THIS MORNING (March 23)

The recent relocation of the highway above the west end of the dam is preliminary to an excavation job ready to get under way. This is the slicing off of an estimated 25,000 yards from the face of the pumping plant site. Slices will be at least 10 feet each and will continue until rock passes desired inspection. Excavation probably will extend about two-thirds the length of the plant site.

Applications for membership in the newly-organized Grand Coulee Yacht club may be secured from Hal Babbitt, secretary, at the Mason City hotel. All applicants who have not sent in their initiation fee are requested to do so on or before the next regular meeting, Friday, April 14, 7:30 p.m., USBR school house.

REMEMBER THAT IT IS DANGEROUS TO TRY TO GET A SUNTAN ALL IN ONE DAY.

Western Pipe & Steel company has completed from 40-45 per cent of their fabrication work on penstock steel, but the placement of sections inside concrete cannot get under way until fall, after high water. This does not refer to the two station-service penstocks.

Workmen are polishing off concrete in the grout leaves in tunnels of the outlet works. When this is okayed by the Bureau of Reclamation a month will elapse, after which upstream bulkheads will be removed, paradox gates put into operation, and Columbia river water will pass through the outlet tubes.

FOUND--a new Firestone tire on wire wheel. Owner can have by identifying.

Main CBI guard office

Work in the first four of the 12 pumping plant tunnels is ended and rock excavation is under way below tunnels 1 and 2, scene for a concrete wall to follow completion of excavation lengthwise and below the tunnels.

Concrete has cured long enough in blocks 32 and 36 for the removal of closure gates. All gates may be removed by April 4. When they are taken away a thin sheet of water will pass over the blocks (el.995). This would not have been true several days ago, but the river is now rising slowly.

In another week all low blocks in the dam will be high enough for diversion plans.

On Sunday rifle enthusiasts will continue construction of a 1000-yard rifle range near Steamboat rock. The pit already has been dug.

The rifle team will have to turn in 30-calibre rifle scores in state matches by March 28.

FOR A BRIGHTER

Easter Parade



you'll want
Quality Jewelry

WHEN you shop for Easter---from that most important gift to the new jewelry you'll want yourself for the Sunday morning promenade--remember: QUALITY jewelry gives lasting satisfaction.

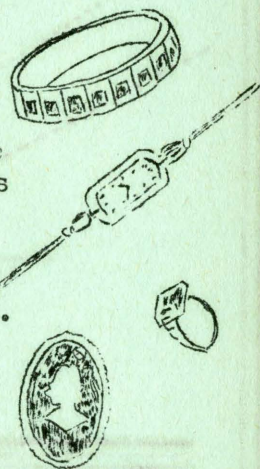
We would like to see you soon..to show you the creations for this brighter Easter season. From costume jewelry to fine watches, expert repair work and engraving, you'll find just what you want. And prices are right too.

FRED N. LUDWIG

Registered Jeweler

The Coulee Dam Jeweler

Mason City, Washington



SAT

SUN

MON

TUE

NORMA
SHEARER and **CLARK**
GABLE

JOSEPH SCHILDKRAUT
EDWARD ARNOLD

CHARLES COBURN
LAURA HOPE CREWS

in
**IDIOT'S
DELIGHT**



MASON CITY THEATRE